

CASE REPORT

Giant fibrovascular polyp of the sigmoid colon

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ABSTRACT

We present a patient with large fibrovascular polyp of the sigmoid; an extremely rare submucosal tumor with only one case report in the literature. A 78-year-old woman presented with constipation and abdominal pain and intermittent maroon stool. Colonoscopic examination and other imaging revealed a large (6 centimeter), intraluminal pedunculated polyp in the sigmoid that was removed as segmental colectomy. Histological diagnosis of the surgical specimen was fibrovascular polyp. Fibrovascular polyp of the colon is an extremely rare submucosal intraluminal tumor that can cause constipation, abdominal pain, obstruction, and or bleeding.

Key words: fibrovascular polyp, submucosal tumor, sigmoid

INTRODUCTION

Fibrovascular polyp is a rare, submucosal tumor-like benign lesion, presenting as pedunculated polyp with intraluminal growth. This lesion is composed of fibrous tissue, vascular structure, and mature adipose cells covered by normal epithelium. The most common location is the upper third of the esophagus.

Fibrovascular polyp of the colon is extremely rare. There is only one case report of Fibrovascular polyp of the colon in the literature reported by Ishigaki et al. in 1994.¹

We present a patient with large fibrovascular polyp of the sigmoid in this paper.

CASE REPORT

A 78-year-old Iranian woman was admitted to hospital in April 2012 due to intermittent melena and maroon stool for 2 weeks. She had history of constipation and vague abdominal pain in the left side for 2 years but denied weight loss nausea/vomiting, and or haematemesis. On examination she was pale, blood pressure was 120/80 mm Hg without orthostatic hypotension, pulse rate was 86 per minute and temperature was 37° centigrade. Abdomen was distended; there was fullness and mild tenderness without rebound in the left lower quadrant. Chest, cardiovascular, central ner-

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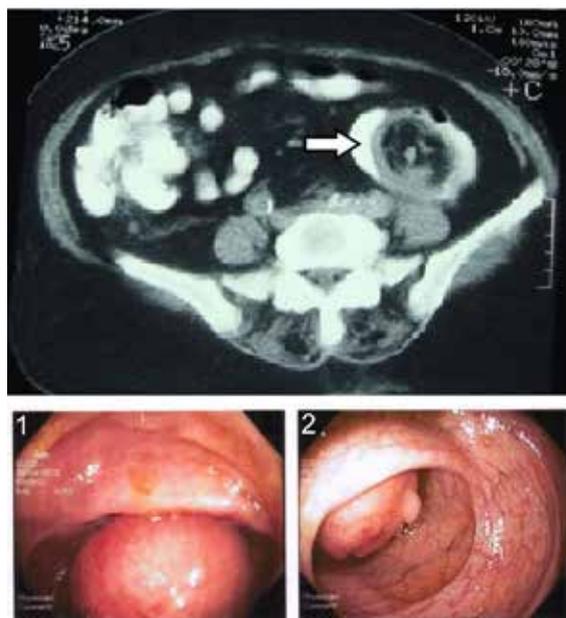


Figure 1, CT scan revealed an intraluminal submucosal mass in the sigmoid that is associated with colo-colic intussusception. CT scan shows that major component of the tumor is fat (top). Colonoscopy examination showed a large intraluminal mass (bottom).

vous, and the musculoskeletal systems were normal on examination. Lab findings revealed microcytic anemia and stool occult blood positivity. Hemoglobin was 10.5 g/dl. Nasogastric tube did not reveal any fresh blood or coffee ground material in the stomach. Upper endoscopy revealed few erosions in the antrum without active bleeding. Colonoscopic examination which was carried out for left lower quadrant pain and stool occult blood positivity, revealed a large mobile submucosal tumor occluding the proximal of the



Figure 2, Sigmoid intussusception and associated mass before resection; tip of the suction tube showing the invagination site

sigmoid lumen. Mucosa of the visualized part of the tumor as adjacent sigmoid mucosa was grossly normal. Large (5×6 centimeters) submucosal tumor with intussusception was suggested (Fig. 1).

Endoscopic biopsies from visualized distal end of the lesion showed normal colon mucosa. Barium enema radiography revealed a large round filling defect in sigmoid; little barium passed through the lesion (Fig. 1). Abdominopelvic contrast computerized tomography (CT) scan revealed a 6×6×5 cm hypo-dense lesion with marked vascularity in the sigmoid presenting as round intraluminal mass; this finding was consistent with soft-tissue tumor and colo-colonic intussusception (Fig. 1). Other organs of the pelvic and abdomen including the liver, gallbladder, spleen, pancreas, and kidneys appeared normal in CT scan. Surgery revealed colo-colonic intussusception and an intraluminal pedunculated large polyp in the sigmoid that was removed as segmental colectomy. (Fig. 2)

Postoperative recovery was uneventful and the patient's complaints were cured. Pathologic assessment of surgical specimen revealed dilated lymphatic channels and congested blood vessels associated with remarkable mature adipose tissue and stroma consistent with intussusception due to fibrovascular polyp. (Fig. 3)

DISCUSSION

Any mass lesion beneath the colon mucosa can elevate the overlying epithelium to produce an intraluminal polypoid appearance. Wide variety of benign or malignant diseases can produce submucosal lesions in the colon. These lesions may be limited to the colon or may present as a component of a systemic disease. Malignant diseases that may cause submucosal mass are as follows: lymphoma², chronic lymphocytic leukemia³, carcinoid tumors, metastatic neoplasms (especially melanoma), and other rare cancers. Lipoma, benign lymphoid polyp, fibroma, neurofibroma,

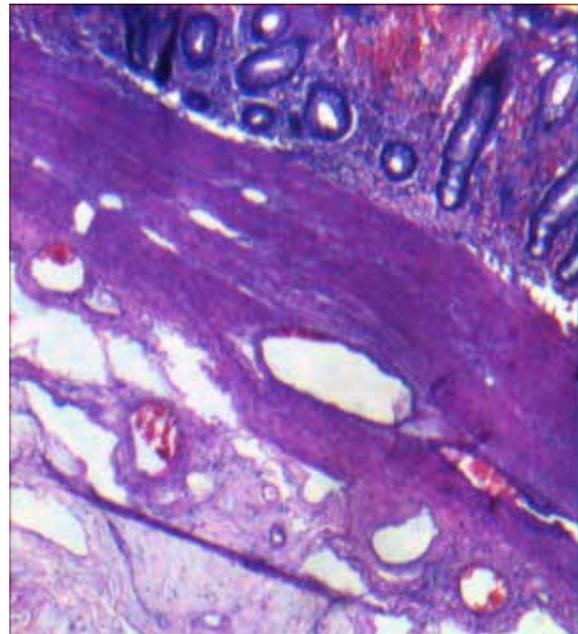


Figure 3, Histopathology assessment of surgical specimen showing dilated lymphatic channels and congested blood vessels associated with remarkable mature adipose tissue and stroma consistent with fibrovascular polyp and intussusception.

leiomyoma, hemangioma, pneumatosis coli, endometriosis, and fibrovascular polyp are benign lesions that can present as submucosal mass in the colon as in the other parts of gastrointestinal lumen.

Fibrovascular polyps (FVP) are submucosal pedunculated tumors with long stalk that occur most commonly in the upper third of the esophagus; except one case of sigmoid fibrovascular polyp that has been reported in 1994¹, all case records of this lesion are related to esophagus. FVP contains a mixture of fibrovascular tissue, adipose cells, and stroma, but is uniformly covered by normal epithelium.

Most of FVPs are asymptomatic; symptoms occur only once the mass has become sufficiently large. Esophageal lesions can cause dysphagia, regurgitation and asphyxiation. FVP of the colon may cause constipation, abdominal pain, intussusception, intestinal bleeding and obstruction as in our patient. High clinical awareness is essential for diagnosis of this rare tumor.

Colonoscopic examination, barium radiology, and computed tomography scan are useful for diagnosis. FVP usually appears as a smooth expansible intraluminal mass at barium study and as a soft tissue lesion with excess fat in CT scan. In colonoscopy FVP presents as a pedunculated mass with a smooth, pinkish mucosa similar to that of the normal colon. Although the correct diagnosis can be suggested by contrast CT scan, histopathologic assessment of the resected polyp retrieved via surgery or endoscopic polypectomy is required for definite diagnosis.⁴ Lipoma is one of the differentials for FVP of the colon; this lesion is an asymptomatic submucosal mass that is usually detected incidentally. The colon especially

ileocecal valve is the most common gastrointestinal site for lipoma.⁵ The low density intraluminal submucosal mass is characteristic radiologic appearance for lipoma. Soft, deformable nature and yellow color of lipoma in the colonoscopy are helpful for making the diagnosis grossly. Removal of the lipoma is not usually necessary.

Other differential diagnoses of FVP are any benign or malignant lesion presenting as submucosal mass such as fibroma, leiomyoma, carcinoid tumors, and metastatic neoplasms.

Symptoms such as obstruction and bleeding are progressive, so removal of the FVP via endoscopic or surgical method is recommended. The most common therapy for esophageal FVP is surgical oesophagotomy with complete excision of the stalk. Although the only reported FVP of the colon (10 millimeter in diameter), has been treated through endoscopic polypectomy¹, lesion in our patient was very large and we couldn't manage it endoscopically. Complete excision of the polyp and its stalk via colostomy is the preferred approach for removing these unusual polyps especially in large ones. Segmental colectomy may be required in larger obstructing FVPs or lesions complicated with intussusception. Endoscopic resection is possible but is generally avoided because of the potential for hemorrhage from the vessels in the stalk.

CONCLUSION

Fibrovascular polyp of the colon is an extremely rare

pedunculated submucosal tumor. This intraluminal lesion can cause constipation, abdominal pain, intussusception and intestinal obstruction or bleeding. Diagnosis can be difficult for physicians who are unfamiliar with this rare unusual polyp. Barium enema radiology, colonoscopy, and CT scan are recommended in the suspected patients. Routine endoscopic biopsy is non-diagnostic. Histopathologic assessment of the whole of the polyp removed by surgical resection or endoscopic polypectomy is essential for definite diagnosis. Complete surgical resection of the polyp and its stalk via colostomy is the preferred treatment. Large FVP complicated with intussusception may need segmental colectomy for complete cure.

REFERENCES

1. Ishigaki H, Tanaka M, Narita T. Fibrovascular polyp of the sigmoid colon. *J Gastroenterol.* 1994 Dec; 29:763-6.
2. Mynster T, Hultberg B, Below S: Multiple lymphomatous polyposis of the colon and rectum. *Scand J Gastroenterol* 1994; 29:545-9.
3. Pescatore P, Benhamou Y, Raphael M, et al: Colonic polyposis as sole manifestation of chronic lymphocytic leukemia. *J Clin Gastroenterol* 1994; 18:248-50.
4. Ridge C, Geoghegan T, Govender P, McDermontt R, Torreggiani W: Giant oesophageal fibrovascular polyp (2005:12b). *Eur Radiol* 2006, 16:764-766
5. De Beer RA, Shinya H: Colonic lipoma. *Gastrointest Endosc* 1975; 22:90-1.